

# The PropNet 30-Meter Operating Event

## October 6-7 2007

I have now been on PropNet for least four years and have been fairly active for three of them. The benefits are numerous to the Ham Radio community. It is especially beneficial towards the study of propagation phenomena that is not well understood. My participation in PropNet became fulltime when I realized the information and data that it gives us would be perfect for the study of what is called Sporadic "Es". For 3 years I have collected and compiled this information and soon will have completed a study that in my belief eliminates the term "Sporadic" from "Es".

A few weeks ago when the idea of a 30 Meter-PropNet event began, I really thought that there would be little use for my participation. I have been a radio aficionado for over 40 years. When I first started shortwave listening back in the mid 1960's, the band I listened to most was the 31 Meter band (9.5-9.8 MHz). Since way back then, whenever I picked up a "Popular Electronics" or a "Radio-TV Experimenter" with "White's Radio Log" magazine, I always looked first at the Propagation Sections of these magazines to better understand when was the best times to listen were. By the time I became a Ham in 1979, I was already well read with W3ASK, George Jacobs' propagation section in CQ Magazine (Now performed by Tomas Hood NW7US). I bought George's book on short-wave propagation the first chance I had.

F2 propagation is fairly easy to understand with practice. Experience is everything. The more you work the bands, the better you get it. The real challenge is to know the best times, at what time of the year, and at what point of the solar cycle you can operate on the bands. That can be overwhelming. For some reason, many do not want to bother with finding out. The answer is not turning on the \$15,000 rig, the 2-kilowatts driving the 15 element 7-Band log periodic, thus creating your own opening. I always have believed understanding propagation is finding out when 5-50 watts to a dipole or vertical would efficiently work DX.

The personal computer has helped the "propagation challenged" Ham determine when and where to operate. One such computer program introduced in the 1980's for DOS computers was Miniprop by Sheldon Shallon, W6EL. The program was simple to operate. All one had to do was plug in the date, the solar indices from WWV, and the call prefix of the station you wanted to work and it produced a nice listing to view or print the best possible opportunities on the HF bands to work the desired DX station. The user could add and delete Bands or add DX locations to the program. When Windows 95 was introduced, a new version of the program called W6ELProp was offered that now utilizes the benefits of improved graphics and CPU speed. The both of the programs are "public domain freeware" for the Ham radio community.

So when the 30-Meter PropNet event was announced, I could not really come up with a reason to participate. I saw no benefit for everyone to be on at the same time. 30 Meters was going to be open for sure during the day and probably most of the night. Being a staunch supporter and participant of PropNet, I decided if I was going to participate there had to be a good reason.

**Therefore, why not see if the propagation predictions from the W6ELProp program were accurate.**

I "lurked" the entire event. Transmitting another signal would only add to the QRM that was going to occur. One thing for sure, PropNet does acquire a few egos. It must be something about seeing your call on a map. I tried hard to say on several occasions, "Anything more than 6 transmissions an hour is QRM and anything more that 15-20 watts does not make it any better." But on the bright side, a wealth of stations did show up and I was able to retrieve a large amount of reliable data in order to see if the program was accurate.

Thanks to all that showed up that weekend and especially to Ev W2EV, Jeff N7YG, Floyd K5LA and Don KB9UMT for all of their efforts to make it success. I hope it drew some more interest and some opportunities to do further investigations. Again, the 3 year Sporadic Es study should be out early next year.

### The Results - October 6-7, 2007:

Total Captures and Identified Partials – 2,767 (58 per hour)

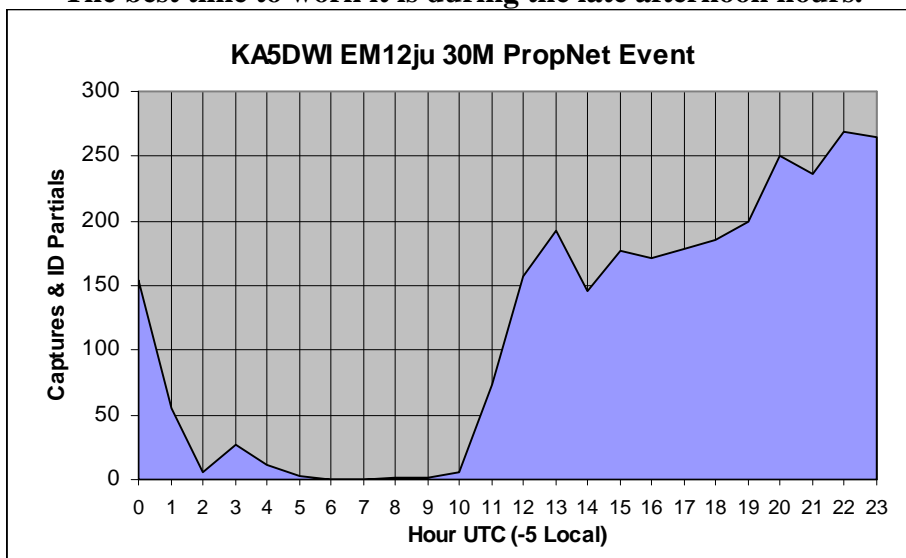
Total Calls Logged: 82

#### How to read the charts:

The line displayed in Charts 2-4 is the probability (or availability) predicted by W6ELProp that a signal will be heard for that location by W6ELProp. This was based on the date October 7, Solar Flux 68.5, and a K index of 1. This was the average for these indices during this period. The bars were the actual number of captures and identified partials for the two-day event. The grid square listed is the center of activity and includes captures from adjacent grid squares in most cases.

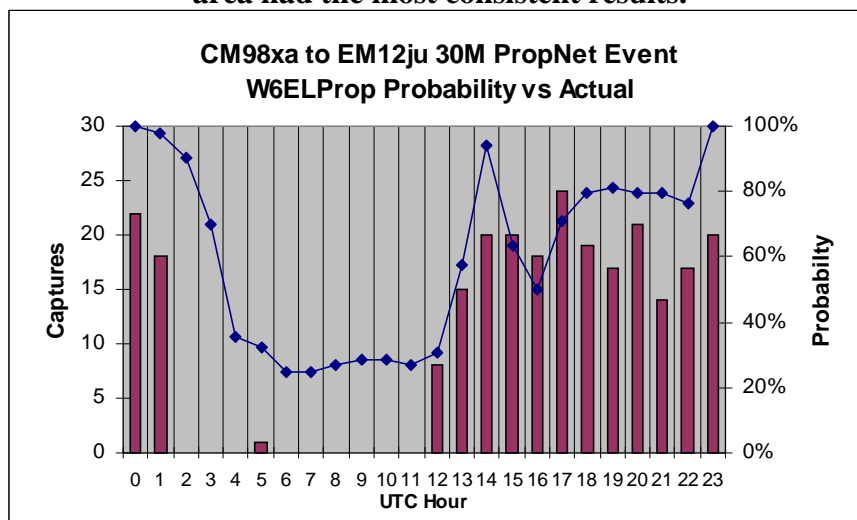
#### Chart 1: Actual Results

As indicated, the 30-Meter Band is better during the daytime hours for general communications. The best time to work it is during the late afternoon hours.

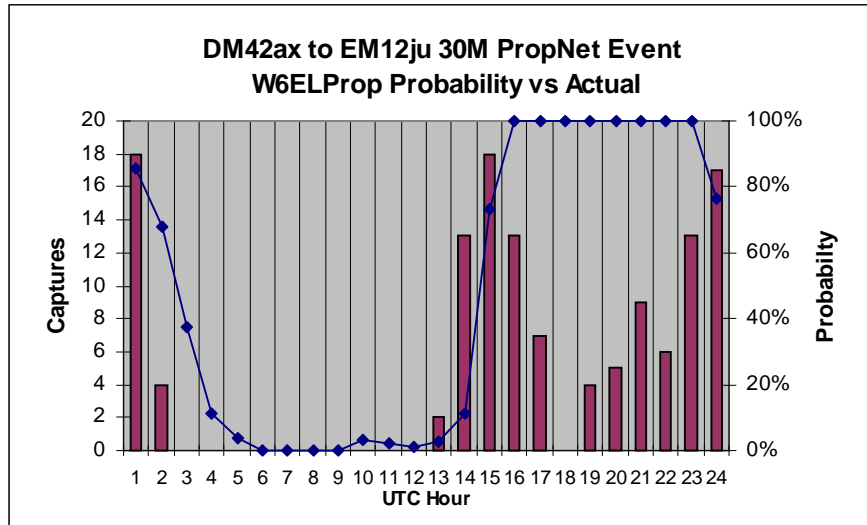


#### Chart 2: Western Paths - W6ELProp Probability Predictions versus Actual Results

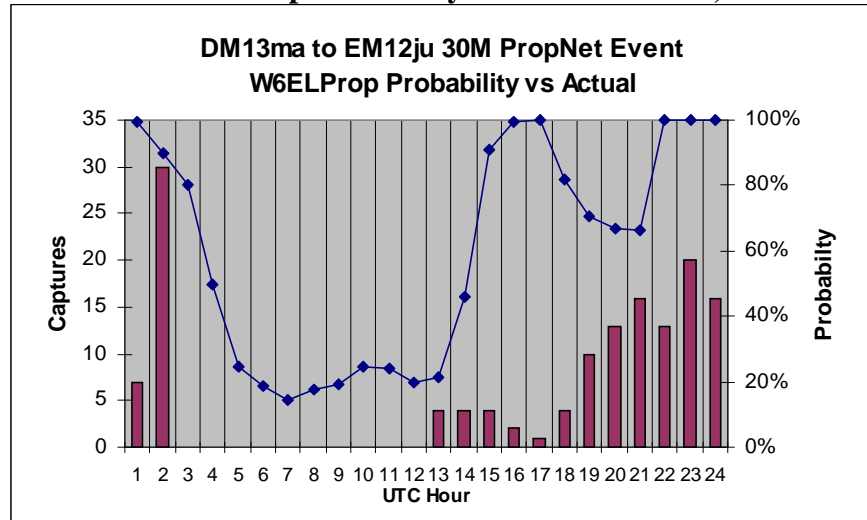
From Northern California, K6BR was one of the most active captures during the weekend. This area had the most consistent results.



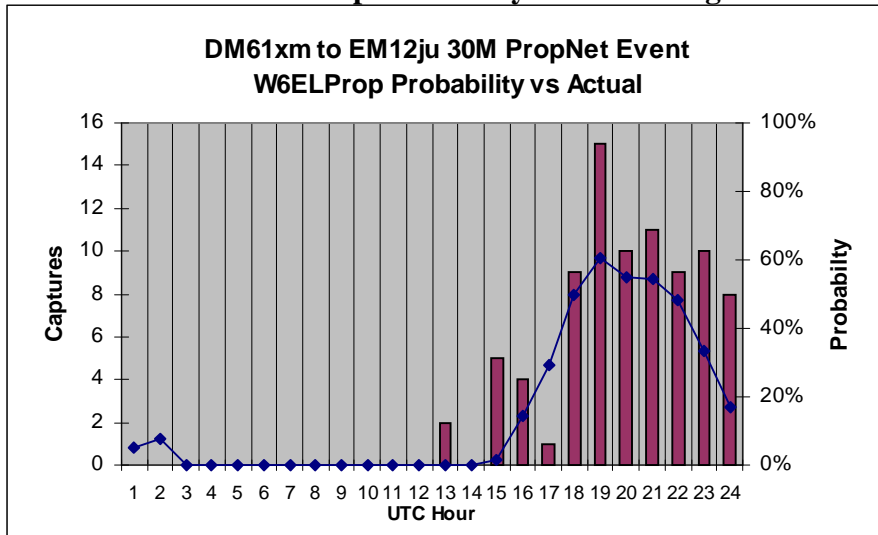
Despite no Jeff N7YG, WA7GIL, W7HD and W7KMV made a good representation from the Arizona desert.



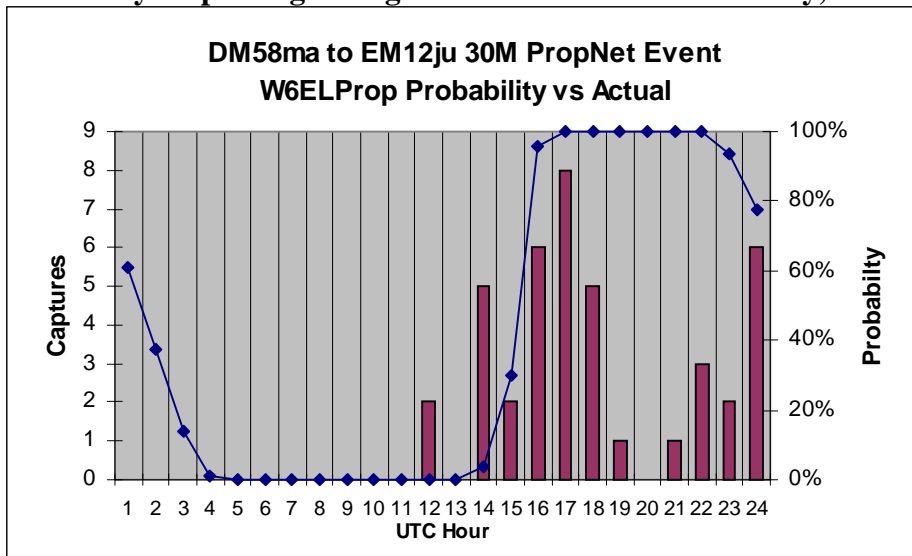
Southern California was well represented by from Ed W3NRG, W6CGH and K6RBS.



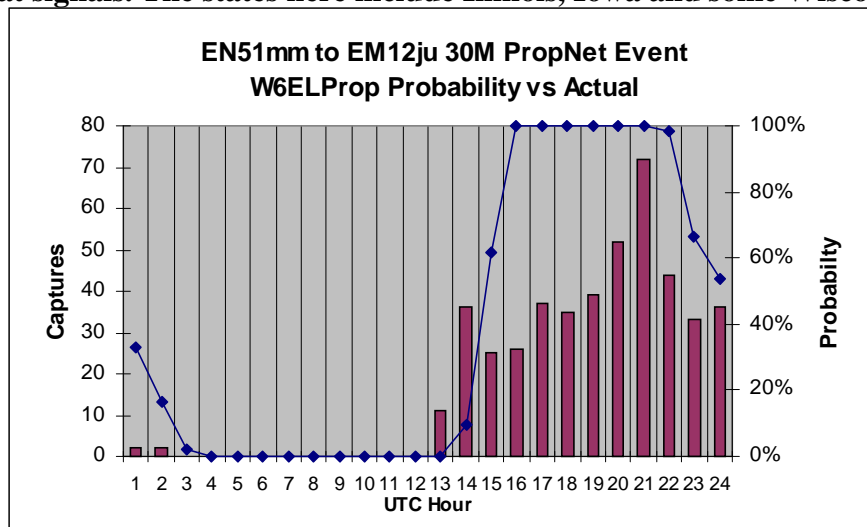
30 Meters showed excellent short F2 hops from Floyd K5LA along with a few from KE5KVJ



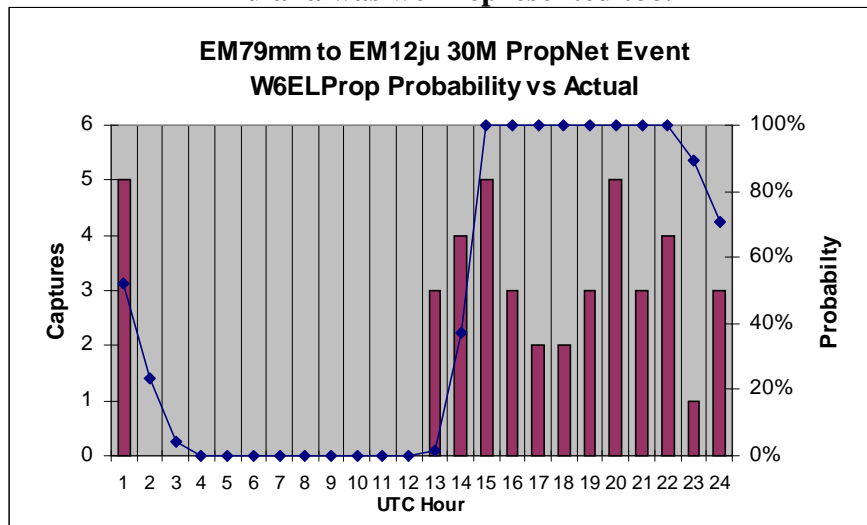
**Chart 3: Northern Paths - W6ELProp Probability Predictions versus Actual Results**  
 One can always expect a good signal from the Reverend Johnny, KD5LWU.



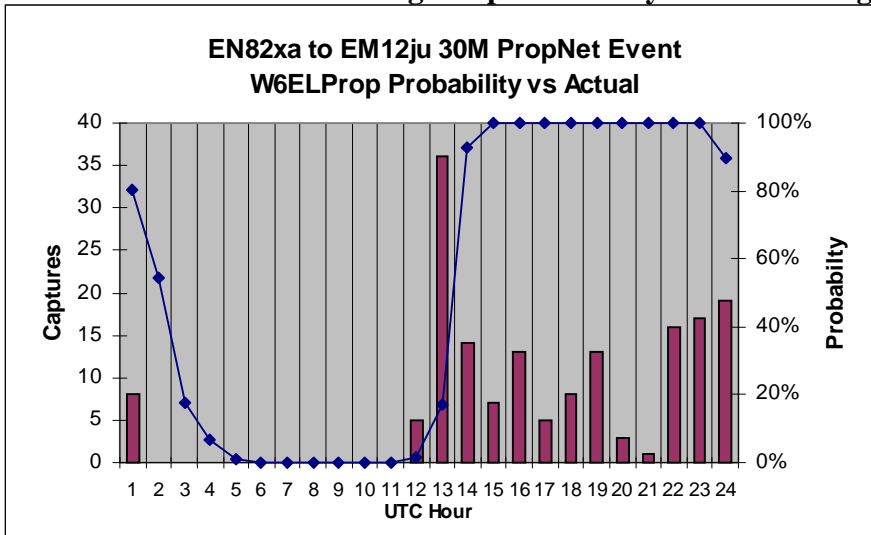
A large cluster of Midwesterners filled the band, sometimes a little too much. They always had great signals. The states here include Illinois, Iowa and some Wisconsin.



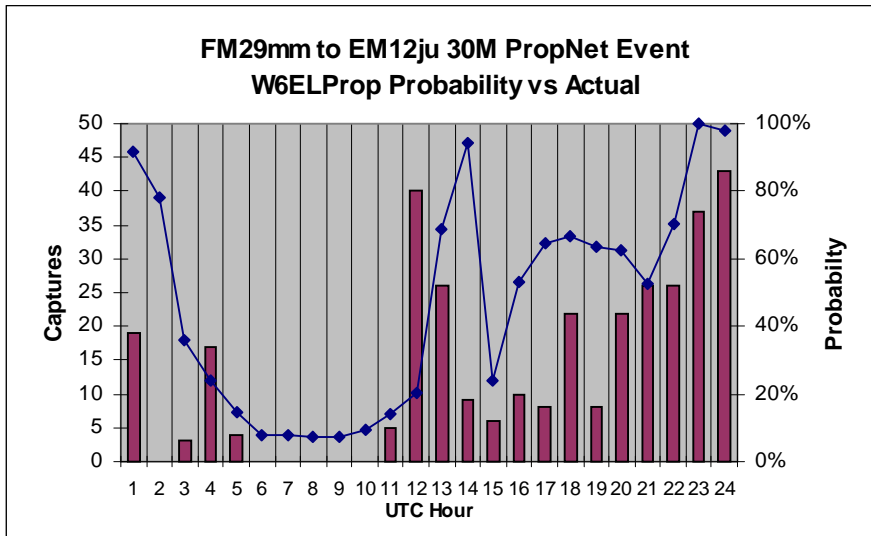
Indiana was well represented too.



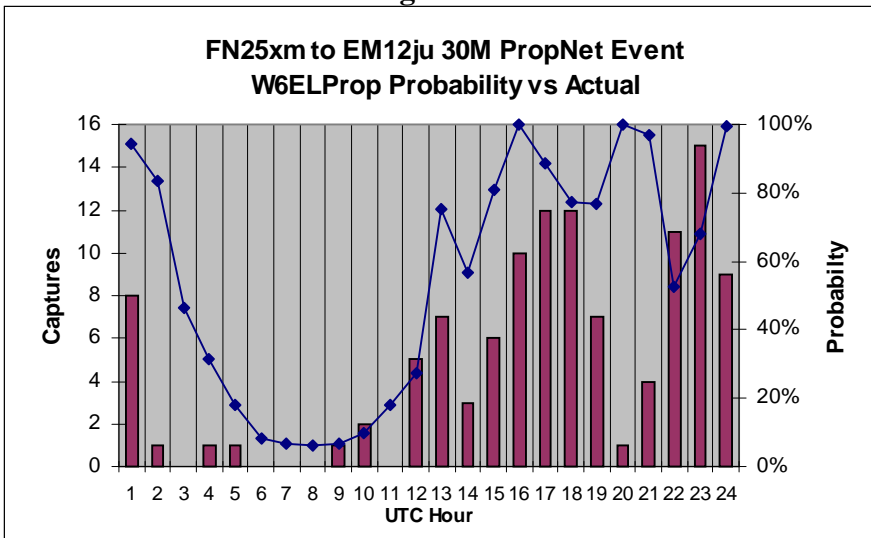
**Detroit and Northern Ohio signals peaked early in the morning.**



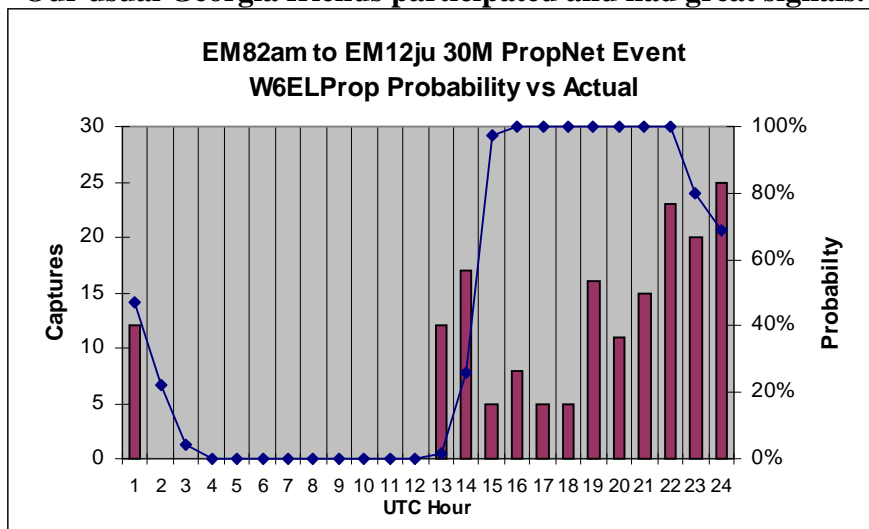
**So did the Mid-Atlantic area have a tremendous amount of activity.**



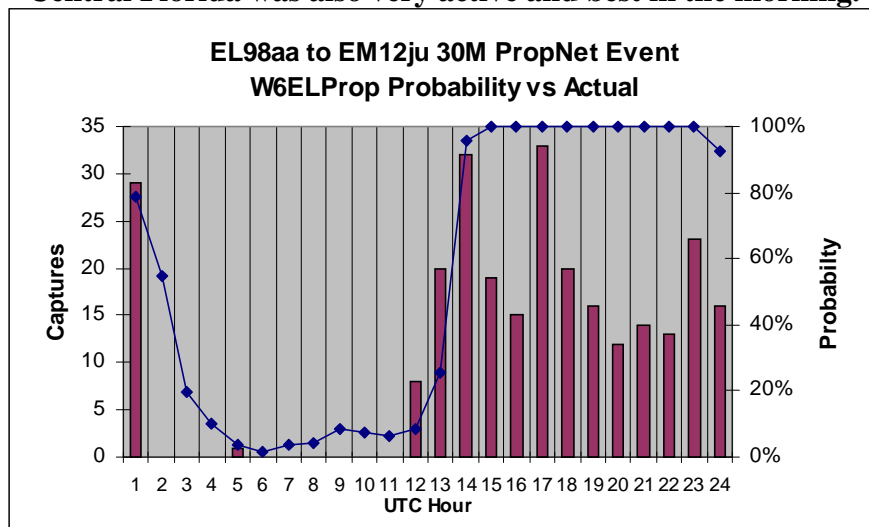
**Our Canadian friends show that longer distances are best in the late afternoon.**



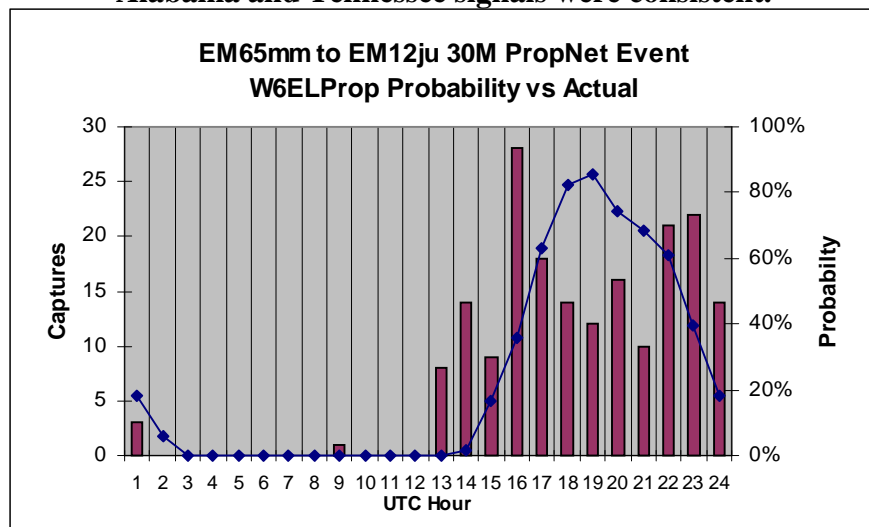
**Chart 4: Eastern Paths - W6ELProp Probability Predictions versus Actual Results**  
 Our usual Georgia friends participated and had great signals.



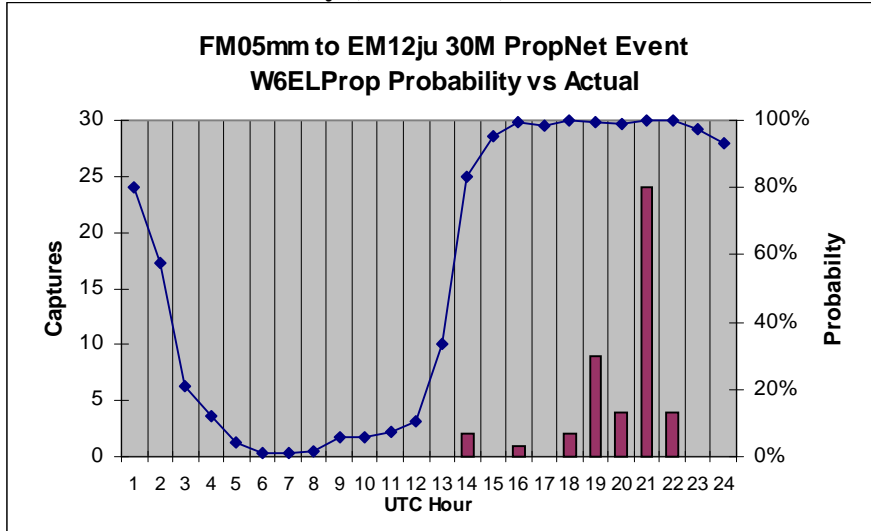
**Central Florida was also very active and best in the morning.**



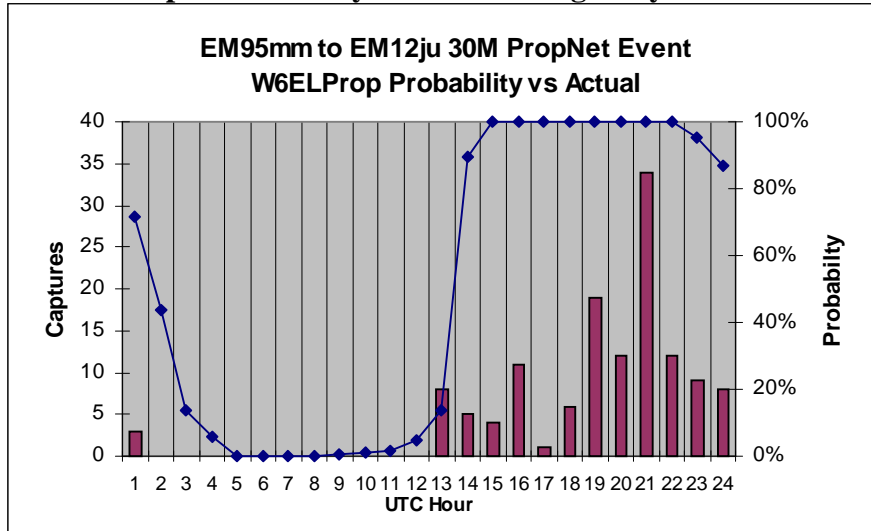
**Alabama and Tennessee signals were consistent.**



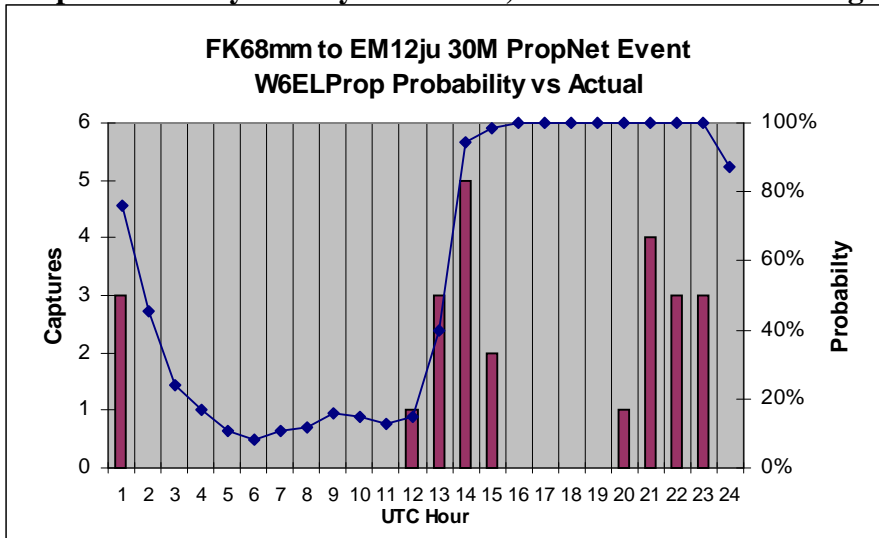
**For one hour each day (2100 UTC) the Carolinas dominated**



**This spike of activity to the east caught my attention.**

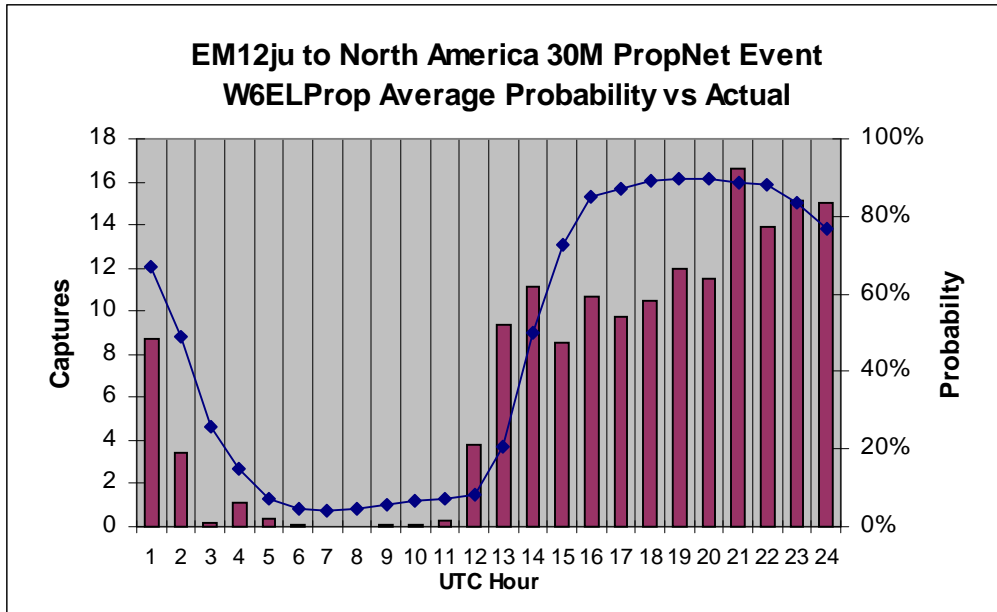


**Despite the heavy activity in the U.S., Puerto Rico came through.**



### Chart 5: Overall Averages

Although each area chart displayed inconsistencies, the overall average was fairly consistent. W6ELProp is very reliable in predicting the probability of communications.



Call	Grid Square
N6TBQ	CM96BO
K6BR	CM97GR
KD6RWF	DM09CC
W3NRG	DM12LP
W6CGH	DM13BR
K6RBS	DM13DO
N7GOC	DM25EF
WA7GIL	DM33VO
W7HD	DM42JI
W7KMV	DM42MG
KD5LWU	DM57RI
WA7BME	DM58FN
K5LA	DM61TV
KE5KVJ	DM61TV
WM5Z	DM62OH
K7DRA	DN51JO
VE5MU	DO70QK
K4ORY	EL86XK
WB4WBL	EL87RU
KD4AC	EL87TT
K4OZS	EL89VD
K4MF	EL98JG
KF4IN	EL98MF
AF7W	EL98OK
KE4JP	EL99IM
N0OBG	EM48RO
WB8SKP	EM56WR
AK9I	EM59CK
KI4EIZ	EM63OG
N4LNE	EM65WP
WK4U	EM74SA
K4DMU	EM78FF
N4KZ	EM78NE
AE5NL	EM79TD
N4CI	EM82DQ
WM4B	EM82EM
NO1R	EM85RG
K4RKM	EM85VF
K4BCE	EM92LC
KK4LH	EM95QN
WD0BFO	EN21AE
WU9Q	EN41RL
WB0KHQ	EN42EB
KB9UMT	EN50DP
AC9S	EN50RG
AH6EZ/W9	EN51SW
AB9LB	EN53RH
N9XGC	EN61AL
KS8O	EN65LL
W8DN	EN70RN
KD8DWX	EN73UO
WU8Y	EN82JW
WB8LI	EN82PQ
W8TAH	EN91CD
WP4SM	FK68TB
WP4JMN	FK68VH
KE4U	FM06LL
KT0P	FM08SB
KI4ITV	FM17FP
K1HTV	FM18OX
WA2WDT	FM19JB
NH7C	FM19KB
K3YJP	FM19LO
NR3I	FM29ER
WB2JEP	FM29LV
W2EV	FN03XD
WB2HVF	FN20MB
N2MH	FN20UT
VE3OAT	FN25EG
VE3MPG	FN25NB
WB8IMY	FN31LL
VE2DC	FN35CH
F6IRF	JN35AU
ZL2NT	RF70MB

**TOTAL CALLS CAPTURED**